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**REMARKS:**

Further consideration of the subject application in light of above amendments and the remarks which follow is respectfully requested.

Claims 1-21 are before the Examiner.

Claims 10-15 are pending.

Claims 1-9 and 16-20 have been withdrawn.

Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, and 16 have been amended. Support is found at paragraph [0079], paragraph [0113] to [0116], paragraph [00118] where it states "Melt Index (g/10 min) was measured according to ASTM D 1238, condition E, 190° C, 2.16 kg mass," paragraph [0028] page 9, line 35, paragraph [[0034]], and paragraph [0030]].

New Claim 21 is supported by original claim 15 and page 28, paragraph [0075].

Applicant respectfully requests reconsideration of the application and upon indication of allowable claims, rejoinder of the withdrawn claims.

## Applicant's Previous Arguments

Applicant has previously argued that the language "consisting essentially of" distinguished over the cited references. Applicant withdraws such previous arguments and does not currently rely on them for patentability.

## Applicant's claimed invention

Applicant's claimed invention relates to a specific blend of 70 to 99 wt% of an ethylene unsaturated ester copolymer (melt index 35 g/10min or less) with 1 to 30 wt% of certain resins (softening point of 100 to 180°C), where the blend has a sealing temperature of less than 115 °C and the maximum hot tack of the sealing layer is greater than the maximum hot tack of the ethylene-unsaturated ester copolymer alone. This is an unusual set of properties not before found in combination.

It is important to note that a consequence of the claimed invention is to provide an improved heat seal strength at lower temperatures (see paragraphs [0080] -[0088] and evidenced by the Examples, and Figure 3, 4, 5, and 6). This is unusual because, generally speaking, heat seals made at lower temperatures with a certain copolymer are weaker than heat seals made at higher temperatures with same copolymer. As evidence of this, see figure 4, where neat polymer seal strengths are depicted as the x's on the graph. Note the general trend is that higher temperature heat requires higher force to separate the layers, which is a measure of seal strength. Note on figure 4 that there is an interesting crossover point however for the specific blend of copolymer and resin. At temperatures of about 98 °C or less the seal strength of the composition with the resin is higher than the neat polymer, but at temperatures over about 98 °C the seal strength is lower than the neat polymer. Another iinteresting thing to note, is the reduction of the heat seal initiation temperature for Applicant's claimed invention. For example see Figure 3. A good heat seal is generally considered to occur at about 0.7 N/cm(see paragraph [004]). Note that the neat polymer in Figure 3 begins to show a good heat seal initiation temperature (0.75 g/30mm) at about 88 °C, while the blend with the resin shows a good heat seal initiation temperature at about 55 ° C, a much lower temperature Applicant's data show the unusual combination of higher strength in the heat seal with low sealing temperatures. This is evidence that the claimed combination has an unexpected technical effect.

## Claim Rejections - 35 USC § 102 and 35 USC § 103

Claims 10-15 have been rejected under 35 USC § 102(b) as anticipated by or, in the alternative, obvious under 35 USC § 103(a) as being unpatentable over US 3,625,727, ("Lightfoot"), US 4,497,941, ("Aliani"), or US 5,185,203, ("Itaba"). The Examiner states that each of the above references teach compositions for heat sealable laminates comprising at least 83% of ethylene/vinyl acetate copolymers having at least 10% vinyl acetate, in combination with a tackifier resin, which are essentially the same as the instant claims. Applicants respectfully disagree.

## Lightfoot

Lightfoot discloses a strippable protective coating formed by spraying a molten composition onto a vehicle body. The coating is an ethylene vinyl acetate (EVA) copolymer blended with another "auxiliary" polymer of lower Mw. (see Abstract, column 1.) The EVA's disclosed in Lightfoot have a melt index of 40 to 750, preferably 100-600. Applicant's amended claims now require an ethylene/unsaturated ester copolymer having a melt index of 35 g/10min or less which are not disclsoe in Lightfoot. Further, specific hydrocarbon tackifier resins (such as resins having a softening point of 100 to 180 °C and selected from a specific group) are also not disclosed in Lightfoot. In fact Lightfoot discloses that low molecular weight EVA's or polyethylenes should be used for his blends. Example 2 does disclose the use of a mixed rosin acid dimer. But such rosins do not fall within the amended claims. Additionally, Lightfoot discloses a coating, preferably a sprayable coating not a heat sealable film.

Applicant also notes that nowhere within Lightfoot is it disclosed that the combination of the resin and the ethylene unsaturated ester copolymer should have a sealing temperature less than 115°C, and that it is desirable that the maximum hot tack of the sealing layer is greater than the maximum hot tack of the ethylene-unsaturated ester copolymer alone.

Thus, since Lightfoot does not disclose or suggest Applicant's particular ethylene/unsaturated ester copolymer, *and* Lightfoot does not disclose or suggest Applicant's particular resins, *and* Lightfoot does not even disclose or remotely suggest heat sealable films, *and* does not disclose or suggest Applicant's heat sealing temperature of less than 115 °C, *and* does not disclose or suggest that the hot tack of a sealing layer is preferably greater than that of the copolymer alone, Applicant respectfully submits that the claimed invention is neither anticipated by Lightfoot nor obvious from Lightfoot. Applicant respectfully requests that the rejections be withdrawn.

## Alani

Alani discloses wax free hot melt adhesives of EVA copolymers having a melt index of 700 to 10,000 to make low viscosity blends (see Abstract). Like Lightfoot above, Alani does not disclose ethylene/unsaturated ester copolymers having a melt index of 35 g/10min or less as required in Applicant's claims. Further Alani discloses hot melt adhesives, which are typically applied to a substrate in a liquid or molten state. In contrast, Applicant's claimed invention is to a sealing layer in a heat sealable film laminate. Alani is not related to the claimed invention at all.

Please note, however that the comparative examples in Alani (Table 2 A, C and D, and Reference III at column 14, line 5) are hot melt adhesive blends with low MI EVA's, Escorez 2203 (softening point about 89-96°C) and wax. Note that the blend named Reference III is taught as insufficient for hot melt applications because of poorer adhesion and cold flexibility at column 14, lines 16-17. Likewise when we examine blends A, C, and D we can see that A, C and D are insufficient for Applicant's films because too much resin is present. Applicant's claims require between 1 and 25 wt% resin. Alani has 35 or 45 wt% resin. Those compositions are hot melt adhesives and thus meant to be sticky. Applicant's composition is meant to be part of a film laminate and thus are not as sticky. Hence, one of ordinary skill in the art would not use Alani's hot melt compositions for a film layer, most notably because they would foul the film extruders.

Furthermore, Applicant also notes that nowhere within Alani is it disclosed that the combination of the resin and the ethylene unsaturated ester copolymer should have a sealing temperature less than 115°C, and that it is desirable that the maximum hot tack of the sealing layer is greater than the maximum hot tack of the ethylene-unsaturated ester copolymer alone.

Thus, since Alani does not disclose or suggest heat sealable film/laminates of blends of Applicants' low melt index EVA (35 g/10 min or less) *and* Applicants specific resins with softening points of 100 to 180 °C *and* Alani does not disclose or suggest blends that could be useful in heat sealable film/laminates, *and* does not disclose or suggest Applicant's heat sealing temperature of less than 115 °C, *and* does not disclose or suggest that the hot tack of a sealing layer is preferably greater than that of the copolymer alone, Applicant respectfully submits that the claimed invention is neither anticipated by Alani nor obvious from Alani. Applicant respectfully requests that the rejections be withdrawn.

## Itaba

Itaba discloses heat sealable crosslinked oriented polyethylene films having a heat sealing layer (of EVA and tackifier) placed thereon. Column 6, line 28, et seq. discloses EVA for the heat seal layer having 20 to 50 wt% vinyl acetate and a melting point of 80 °C or less. No mention is made of the melt index of the EVA. Resins disclosed for use in the sealing layer are cyclopentadiene-series petroleum resins, hydrogenated petroleum resins, polyterpene resins, rosin resins, cumarone-indene resins and phenolic resins( see Column 6, lines 42-46). Furthermore, Itaba's examples 1, 2, and 3 and comparative example 1 disclose EVA (melt index 15 g/10min, vinyl acetate 35% see column 8, lines 40-41) blends with Escorez 5280 (a partially hydrogenated resin with a softening point of about 80 to 90 °C).

Applicant's claimed invention requires a resin having a softening point of 100 to 180°C. Itaba's specification and specifically the examples do not disclose or suggest specific resins having a softening point of from 100 to 180°C. Applicant respectfully submits that the claimed invention is neither anticipated by Itaba nor obvious from Itaba. Applicant respectfully requests that the rejections be withdrawn.

## Miscellaneous

Applicant notes that the European Patent Office and the Chinese Patent Office have examined their respective counterparts to this application and have cited the same four documents, two of which were Alani and Itaba. The other two were: EP 0 957 147 (equivalent to US 6,235,818), and W0 2003/039860. Both of these documents were review by the instant Examiner on May 1, 2006.

## Conclusion

For at least the reasons cited above, Applicants believe that the instant claims are allowable and respectfully request that the Examiner withdraw his objections and allow same.

Please charge all charges with respect to this Amendment or otherwise, to Deposit Account No. 05-1712 maintained by the Assignee.

Respectfully submitted,

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